

CLAIMS

1. A method for transferring thermoformed articles, which are separated with respect to a sheet of thermoformable material, from a station to separate the articles to a subsequent processing station,
5 characterized in that each of said articles exiting from said separation station is drawn by suction and made to travel inside a corresponding duct as a result of a condition of vacuum pressure produced in proximity to the inlet of said duct and inside said duct.
2. A method according to claim 1, wherein said condition of vacuum
10 pressure is produced by injecting pressurized air into an intermediate portion of said duct.
3. A method according to claim 2, wherein the injection of pressurized air is implemented inside said duct in the form of individual jets delivered from at least one series of nozzles equidistant from said
15 inlet.
4. A method according to any one of the preceding claims, wherein said nozzles are equidistant from one another along the internal surface of said duct.
5. A method according to any of the preceding claims, wherein said
20 nozzles are fed by means of through holes with an axis inclined with respect to the axis of said duct.
6. A method according to claim 2, wherein injection of pressurized air is implemented inside said duct in the form of a blade of air delivered through a continuous peripheral aperture.
- 25 7. A method according to claim 6, wherein said continuous peripheral aperture has an inclined section with respect to the axis of said duct.
8. A method according to claim 6 or 7, wherein said continuous peripheral aperture has a section of variable width.

9. A method according to any of the preceding claims, wherein said article is made to travel to the output of said duct and directed along one or more guide members for each of said articles.
10. A method according to any of the preceding claims, wherein said
5 article is made to travel to the output of said duct and deposited on a shaped element, the form and dimensions of which are essentially complementary to those of said article.
11. A method according to claim 10, wherein said shaped element is movable between at least one position to receive said article and at
10 least one position to release said article.
12. A method according to claim 10, wherein said article is held on said shaped element by means of a vacuum pressure produced between said shaped element and said article.
13. A method according to claim 1, wherein said separation station is
15 incorporated in a thermoforming mould.
14. A method according to claim 1, wherein a cutting unit is incorporated in said separation station.
15. A device to transfer thermoformed articles, which are separated with respect to a sheet of thermoformable material, from a station for
20 separating the thermoformed articles to a subsequent processing station, characterized by including means to produce a condition of vacuum pressure in proximity to the inlet of a transfer duct and inside said duct.
16. A device according to claim 15, wherein said means to produce a
25 condition of vacuum pressure consist of means to inject pressurized air into an intermediate portion of said duct.
17. A device according to claim 16, wherein said means to inject pressurized air include at least one series of nozzles disposed inside said duct in positions equidistant from said inlet.
18. A device according to claim 17, wherein said nozzles are equally

spaced along the internal surface of said duct.

19. A device according to any of claims from 15 to 18, wherein said nozzles form the outlet of through holes with an axis inclined with respect to the axis of said duct.

5 20. A device according to claim 16, wherein said means to inject pressurized air inside said duct include at least one continuous peripheral aperture.

21. A device according to claim 20, wherein said at least one continuous peripheral aperture has a section inclined with respect to the
10 axis of said duct.

22. A device according to claim 20 or 21, wherein said continuous peripheral aperture is positioned between at least two reciprocally aligned contiguous portions of duct.

23. A device according to claim 22, wherein means are provided to
15 move said at least two portions of contiguous duct towards and away from each other to vary the amplitude of the section of said at least one peripheral aperture.

24. A device according to any of claims 15 to 23, wherein said duct is
20 disposed immediately upstream of one or more guide members for each of said articles.

25. A device according to any of claims 15 to 24, wherein it is provided at least one shaped element on which said article is deposited, the form and dimensions of said shaped element being essentially complementary to those of said article.

26. A device according to claim 25, wherein said shaped element is
25 movable between at least one position to receive said article and at least one position to release said article.

27. A device according to claim 25, wherein means are provided to produce a vacuum pressure between said shaped element and said

article to hold said article on said shaped element.